

**REMARKS**

This amendment is filed in response to the Office Action mailed September 8, 2005.

The Examiner rejects Claim 89 under 35 U.S.C. § 112, first paragraph, on the grounds that it introduces new matter, asserting that the limitation of "at least one of the prepreg plies is a stiffness treated prepreg ply not in contact with the honeycomb core" is not supported by the disclosure.

The Examiner rejects Claims 55 and 57-59 under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over *Corbett et al.* (5,895,699).

The Examiner provides no grounds for the rejection of Claim 88.

Applicants amend Claims 55, 88 and 89 to overcome the Examiner's rejections placing the application in order for allowance.

**Rejection Under 35 U.S.C. § 112, first paragraph**

The Examiner rejects Claim 89 under 35 U.S.C. § 112, first paragraph, on the grounds that it introduces new matter, asserting that the limitation of "at least one of the prepreg plies is a stiffness treated prepreg ply not in contact with the honeycomb core" is not supported by the disclosure.

Applicants respectfully disagree with the Examiner that they were not in possession of this embodiment of the invention. One embodiment involves a stiffness-treated prepreg ply in contact with a first surface of the honeycomb core and another embodiment involves an untreated prepreg ply in contact with a first surface of the honeycomb core. See Page 36, lines 13-24, for example.

However, applicants amend Claim 89 to further clarify in accordance with the language in the specification.

As such, applicants respectfully assert that the Examiner's rejection is overcome and Claim 89 is now in a position for allowance.

**Rejection Under 35 U.S.C. § 102(e) and 103(a)**

The Examiner rejects Claims 55 and 57-59 under 35 U.S.C. § 102(e) as anticipated by *Corbett et al.* or obvious under § 103(a) in light of *Corbett et al.*

The Examiner asserts that applicants Claim 55 is deficient in that it only recites that the stiffness treated ply is adjacent to the second prepreg ply, without restriction to which layer contacts the honeycomb core and further that the comprising language means that the structure can have additional layers.

Applicants amend Claim 55 to overcome these deficiencies.

The Examiner next asserts that applicants are inconsistent in asserting that the materials used in the claimed invention are different from those used by *Corbett et al.* Applicants claim a treated stiffening material that may have similar precursors to the untreated resin material utilized by *Corbett et al.*, but which material is conditioned or polymerized whereas that used by *Corbett et al.* is not. As such, the stiffness values of a treated and untreated fiber will not be inherently the same. Also, the Examiner is concerned with the claim language of a "polymerized polymeric stiffening material." Support for this language is derived from page 15 of the specification, among other places, where it is stated that "polymerization of the precursors of the polymeric material with each other..." Also page 16, where it is stated that the "derivatives may be polymerized from the precursors at any time until the time a structure which incorporates the stiffness-enhanced fabric has been formed and consolidated." Furthermore, page 16, line 27 defines derivative formation as "polymerization. This polymerized material being the stiffening material. However, in order to overcome the Examiner's concerns, and to further clarify the distinction between the present invention and *Corbett et al.*, applicants amend the claim limitation to "polymerized precursors of a polymeric material."

The Examiner also asserts that the term "plurality of fibers" in the claim is inconsistent with the argument of "untreated fabric." Applicants are unclear as to how the Examiner concludes this is inconsistent. The stiffness-treated fabric has fibers that are treated. A standard prepreg material as disclosed by the prior art has fibers that are untreated. However, in order to further clarify the treatment applied to the fibers of the stiffness-treated fabric, applicants amend this claim limitation to be a "polymerized precursor of a polymeric material" to overcome the Examiner's concern.

The Examiner's argument that, "Thus the polymerized material, which would be present in the claimed product can be any type of thermoplastic or thermoset polymeric coating with limitation" is misleading. The specification discloses that the

precursors of a polymeric material are advanced or polymerized. Page 20, lines 13-29. This is opposed to *Corbett et al.* which has precursors that are not advanced. As such, the treated material on the fibers of applicants' invention is not the same or taught by the untreated material on the fibers of *Corbett et al.*

The Examiner further has concern with the definition of "untreated fabric." Office Action page 5. It appears that the Examiner is misunderstanding the term "untreated." The term "untreated" refers to lacking a treatment to advance polymerization of the polymeric precursor material on the fibers (such as disclosed on page 20, lines 13-29 of the specification); not to whether the fabric has any precursors of a polymeric material applied to the fibers. As such, *Corbett et al.* does not teach using treated materials within the scope of the stiffness-treated prepreg plies as claimed.

As such, *Corbett et al.* does not teach or disclose the use of treated material as claimed. The polymeric precursors may be similar, but the prior art does not teach advancing or polymerizing the polymeric material in order to increase stiffness. Therefore, the stiffness properties of an advanced polymeric material are not inherent to a polymeric material and do not make applicants invention obvious.

As such, applicants respectfully assert that the Examiner's rejection is overcome and Claim 55 is now in a position for allowance.

The Examiner does not providing any basis for rejecting Claim 88. However, applicants amend Claim 88 in conformity with the amendments made to Claim 55 and Claim 89.

Accordingly, Applicants respectfully request that the Examiner's rejections be withdrawn and that Claims 55, 57-59, 88 and 89 are in position for allowance.

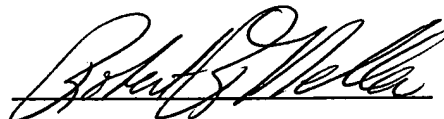
It is submitted that the prepreg of a honeycomb sandwich structure precursor as claimed defines a patentable invention. Reconsideration of the application is respectfully requested and prompt allowance is sought. Please direct any questions to the undersigned attorney at (714) 666-4396.

The Commissioner is hereby authorized to charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to Deposit Account No. 03-4083.

Respectfully submitted,

Dated: December 8, 2005

Cytec Industries Inc.  
1937 West Main Street  
P.O. Box 60  
Stamford, CT 06904  
Telephone (714) 666-4396  
Facsimile (203) 321-2971



Robert R. Neller  
Registration No. 46,950  
Attorney for the Applicants